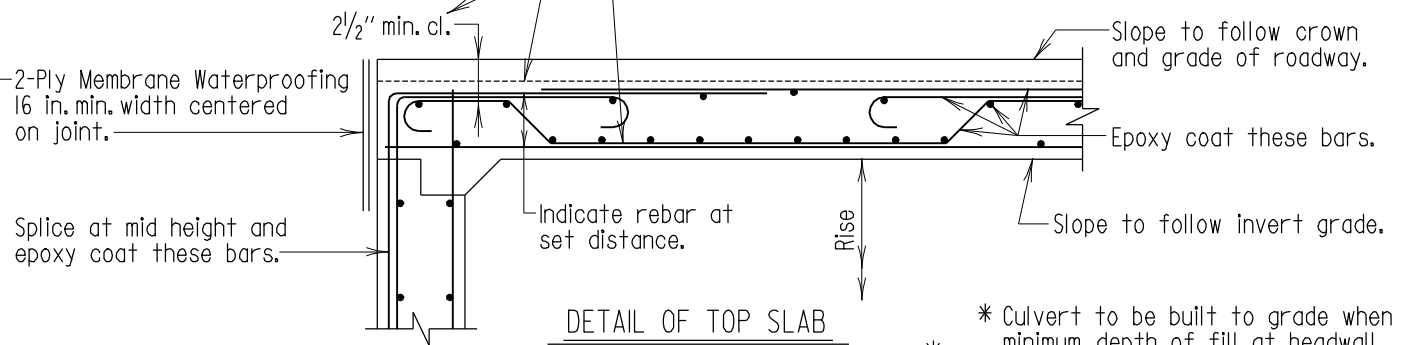


If minimum clearance exceeds 6 in., then an additional mat of epoxy coated 6 x 6 - W2.9 x W2.9 welded wire fabric shall be placed 3 in. clear from finished top of slab for full length and width of culvert.

Note : A

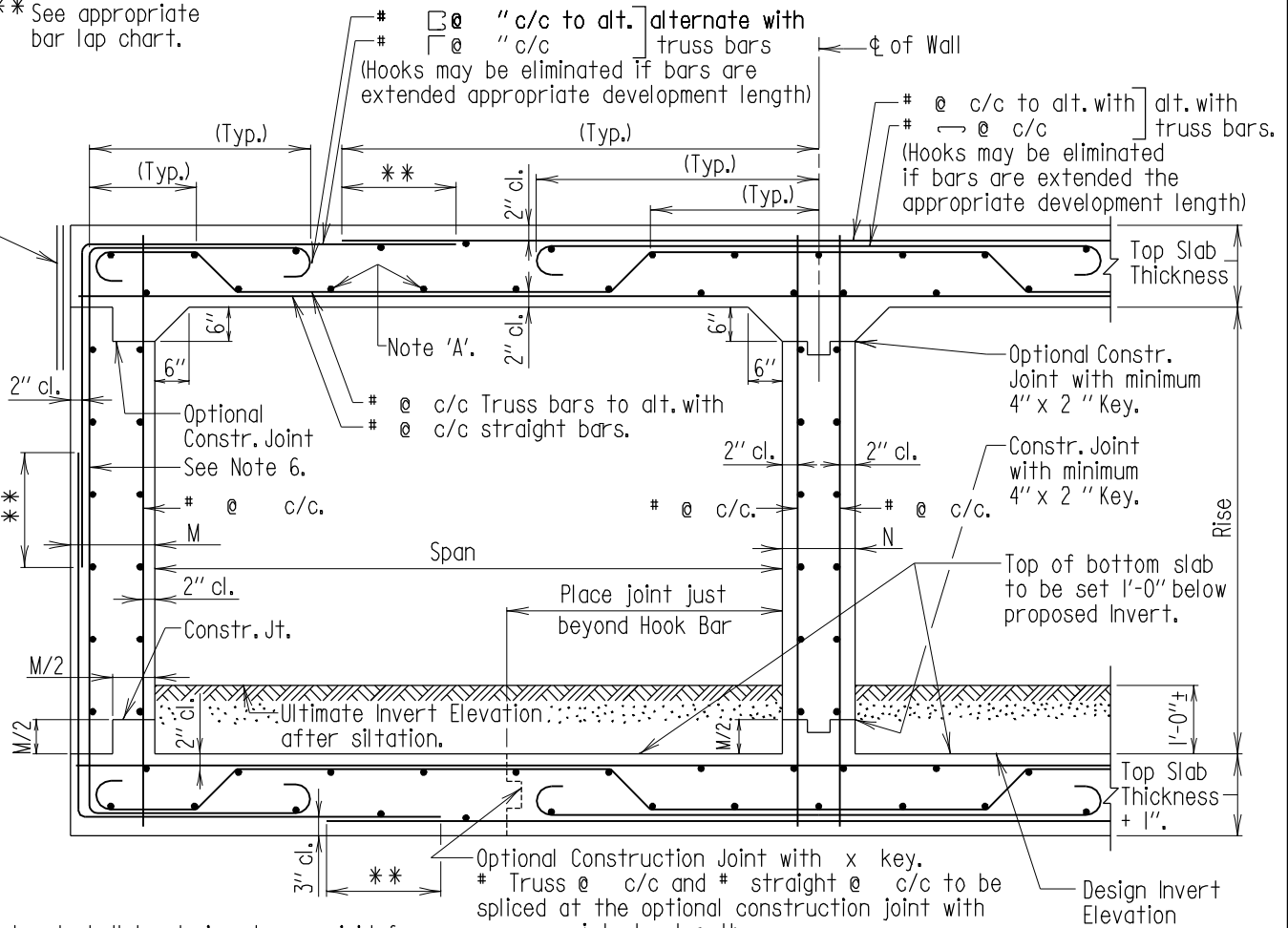
When depth of fill over top slab is equal to or less than 2'-0" the longitudinal bars in the bottom of the top slab shall be # @ c/c \pm . All other longitudinal bars to be #4 @ 1'-6" c/c \pm .



DETAIL OF TOP SLAB WHEN CULVERT IS BUILT TO GRADE *

* Culvert to be built to grade when minimum depth of fill at headwall is less than 9 in.

** See appropriate bar lap chart.



Note:

- Box Culvert shall be designed as a rigid frame.
- Reinforcing in bottom slab same as top slab except for any longitudinal steel added when depth of fill on top slab is 2'-0" or less.
- Minimum thickness of sidewalls to be 11 in.
- All longitudinal bars to be #4's spaced as shown with a maximum spacing of 1'-6" c/c; except for any additional steel that may be required when depth of fill on top slab is 2'-0" or less.
- If piles are used; bottom slab shall be increased 9" in thickness and piles shall be equally spaced in the transverse direction as well as equally spaced in the longitudinal direction.
- If rise exceeds 10'-0", this bar may be lapped at mid height at Contractors option.

TYPICAL SECTION

- If bottom slab exceeds 18" in thickness, longitudinal bars shall become #4's @ 1'-0" max.
- Concrete cover shall be increased from the cover indicated in typical section to 4" clear for all surfaces with direct exposure to salt water.

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

TYPICAL SECTION
MULTI-CELLED BOX CULVERT

APPROVAL	
<i>E.S. Friedman</i> DIRECTOR	OFFICE OF BRIDGE DEVEL.
DATE: 2/23/77	
REVISIONS	
SHA	FHWA
2-4-94	
7-15-94	
1-22-01	
10-9-07	

FHWA APPROVAL
DATE: 2-25-77

STANDARD NO. BC(6.08)-76-39

SHEET 1 OF 1

BOX CULVERT